

Department of Energy

Ohio Field Office Fernald Area Office

P. O. Box 538705 Cincinnati, Ohio 45253-8705 (513) 648-3155



DOE-0399-02

MAR 27 2002

Mr. Gene Jablonowski, Remedial Project Manager United States Environmental Protection Agency Region V, SRF-5J 77 West Jackson Boulevard Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager Ohio Environmental Protection Agency 401 East 5th Street Dayton, Ohio 45402-2911

Dear Mr. Jablonowski and Mr. Schneider:

TASK ORDER IMPLEMENTATION SCHEDULE FOR ABOVE GRADE DECONTAMINATION AND DISMANTLEMENT OF COMPONENT 18M UNDER THE MISCELLANEOUS SMALL STRUCTURES DECONTAMINATION AND DISMANTLEMENT PROJECT IMPLEMENTATION PLAN

Enclosed is a copy of the task order implementation plan and schedule for the Above Grade Decontamination and Dismantlement (D&D) of Component 18M planned in accordance with the scope and authority of the Miscellaneous Small Structures (MSS) Project Implementation Plan for your review and approval. The enclosed submittal to the MSS Implementation Plan provides the salient elements for accelerated remediation of Component 18M and its associated piping/pumps from the Operable Unit 5 (OU5) Complex. Component 18M is the High Nitrate Tank as identified in the Operable Unit 3 (OU3) Integrated Remedial Design/Remedial Action Work Plan. The schedule for dismantlement of component 18M has been accelerated in order to support the Silos 1 and 2 Project and rail infrastructure required to support rail shipment to Envirocare for final disposal.

The enclosure provides a description of the work and the implementation schedule for the activity. The implementation schedule contains three regulatory milestones:

- 1) Notice to Proceed May 15, 2002
- 2) Completion of Field Activities July 30, 2002
- 3) Submittal of Project Completion Report August 30, 2002

Mr. Gene Jablonowski

Mr. Tom Schneider

-2-

DOE-0399-02

If you have any questions, please contact John Tryiger at (513) 648-3154.

Sincerely,

Johnny W. Reising Fernald Remedial Action

Project Manager

FEMP:Trygier

Enclosure: As Stated

cc w/enclosure:

- R. Greenberg, EM-31/CLOV
- J. McCloskey, EM-31/CLOV
- J. Trygier, OH/FEMP
- T. Schneider, OEPA-Dayton (three copies of enclosure)
- J. Saric, USEPA-V, SRF-5J
- F. Bell, ATSDR
- F. Hodge, Tetra Tech
- M. Shupe, HSI GeoTrans
- R. Vandegrift, ODH

AR-Goordinator, Fluor Fernald, Inc./MS78

- cc w/o enclosure:
- A. Tanner, OH/FEMP
- D. Carr, Fluor Fernald, Inc./MS2
- T. Hagen, Fluor Fernald, Inc./MS65-2
- M. Stevens, Fluor Fernald, Inc./MS44-0
- ECDC, Fluor Fernald, Inc./MS52-7

AMENDMENT #4 - MISCELLANEOUS SMALL STRUCTURES TASK ORDER IMPLEMENTATION PLAN FOR ABOVE GRADE DECONTAMINATION AND DISMANTLEMENT OF COMPONENT 18M (HIGH NITRATE STORAGE TANK)

FEBRUARY 2002

1.0 Project Statement

Component 18M (High Nitrate Tank) is undergoing accelerated remediation under the scope of the Miscellaneous Small Structures (MSS) Decontamination and Dismantlement (D&D) project.

Component 18M is identified in the Operable Unit 3 (OU3) Integrated Remedial Design//Remedial Action (RD/RA) Work Plan (DOE 1997) as an Operable Unit 5 Remediation Complex component. The schedule for dismantlement of Component 18M has been accelerated in order to support the Silos 1 and 2 Project. To achieve the new FEMP cleanup goals for 2006, the path forward for the Silos 1 and 2 Project involves a commitment to ship the stabilized Silos 1 and 2 material by rail to Envirocare for final disposal. Accordingly, the FEMP site rail infrastructure must be extended and integrated with the new Silos 1 and 2 treatment facility. Therefore, the High Nitrate Storage Tank and its associated piping/pumps must be demolished in order to allow for the construction of the new rail spurs. This document serves as amendment number four to the MSS D&D Project Implementation Plan (DOE 1998). The approved remediation requirements detailed in the MSS Implementation Plan, including the attached revised performance specifications, will apply to Component 18M.

This document provides the pertinent information required for amending the MSS D&D Project Implementation Plan and the requisite implementation schedule for the particular task order prepared for the fieldwork. Section 2 of this document contains the component-specific description, characterization and implementation details developed for D&D of the structure. Section 3 provides a summary of debris/waste volume estimates and disposition plans. Section 4 provides the implementation schedule. Section 5 provides a photograph of the Component 18M exterior and a sketch of the area that shows the future rail infrastructure location with relation to Component 18M.

2.0 Component-Specific Remediation

This section presents component-specific background and remediation details for Component 18M. Background information provided in this section was obtained primarily from the OU3 Remedial Investigation/Feasibility Study Work Plan Addendum (DOE 1993). Information regarding the remediation approach was obtained from the project planning work scope documents/specifications and the OU3 Integrated RD/RA Work Plan.

2.1 Component 18M - High Nitrate Storage Tank

Background - Component 18M (High Nitrate Storage Tank) is a 500,000 gallon vertical steel

4205 4205

Amendment #4 - Miscellaneous Small Structures Implementation Plan for Above-Grade D&D ECDC Doc. Control 3-1751-PL-0001 (Rev. 0) February 2002

tank measuring 60 feet in diameter. The tank rests on a poured concrete diked pad measuring 112 feet in diameter. The unit was constructed for auxiliary support of the biodenitrification processing activities.

Characterization - This tank was used to provide interim storage of filtrate from the uranyl nitrate (UNH) neutralization project.

Remediation Tasks:

Preparatory Actions – The Aquifer Restoration group will remove the UNH process filtrate residue from Component 18M. The Facilities Shutdown group will isolate all active utilites at - Component 18M.

Asbestos Removal – There are no asbestos containing materials present in Component 18M or its associated piping/pumps.

Surface Decontamination – A radiological survey for loose contamination will be performed following removal of sludge from 18M. If radiological survey results are above 5,000 dpm/100 cm² beta-gamma removable, a gross wash down of the tank and its associated piping/pumps will be performed prior to dismantlement.

Above-Grade Dismantlement – Hydraulic shears, hydraulic concrete crushing or oxygas/oxy-acetylene torches are the preferred methods to be used to dismantle and size-reduce the tank and associated piping/pumps.

At and Below-Grade Dismantlement – The Soils and Disposal group will demolish and remove the retaining concrete wall and slab.

3.0 Debris/Waste Volume Estimates

Initial debris volume estimates for Component 18M are listed below. Volume estimates for Component 18M are based on measurements taken during a field walk down. Detailed take-off estimates using architectural drawings are currently underway under the D&D planning process and will be entered into the project file to supersede these original estimates.

- Category A, B & D (Metals): 220 bulked yds³ (OSDF disposition if in accordance with WAC)
- Category E (Concrete): 213 bulked yds³ (OSDF disposition if in accordance with WAC)
- Category I2 (Miscellaneous Materials PVC pipe): 5 bulked yds³ (OSDF disposition if in accordance with WAC)
- Category 14 (Miscellaneous Materials Wood): 5 bulked yds³ (OSDF-disposition if-in-accordance with WAC)
- Profile 80094: 5 bulked vds³ (Waste Acceptance Operations will require evaluation)

Materials that are identified as being process related will require a visual inspection to ensure no OSDF prohibited residues are present. Waste Acceptance Operations will require an evaluation of the profile 80094 materials that fail this visual inspection.

An evaluation of Category A debris (Structural Steel) was performed to determine whether alternative material disposition (e.g., recycling) may be a viable option. The Decision Methodology evaluation process for disposition alternatives, which was documented in Appendix B of the MSS Implementation Plan, was applied to the estimated 1.5 tons of structural steel (weight equivalent for 4.4 bulked yds³ from 18M) using the most current unit prices (documented in the Multi-Complex Implementation Plan, DOE 2001). The evaluation revealed that On-Site Disposal for the 1.5 tons would cost approximately \$120. The nearest alternative (Vendor Material Release Facility) had a cost of approximately \$1,230, which equates to a cost differential of 1,025 percent. Due to the large cost differential, the chosen disposition route for Category A debris is the OSDF.

4.0 Schedule

The implementation schedule for field remediation of 18M is shown as follows:

Activity Description	Early Start	[]	2002							
		Early Finish	Mar	Apr	May	June	July	Aug	Sept	Oct
NOTICE TO PROCEED	15-May-02				•		1			
FIELD REMEDIATION COMPONENT 18M	29-May-02	30-Jul-02								
COMPLETION OF FIELD ACTIVITIES		30-Jul-02					•			
ISSUE TASK ORDER COMPLETION REPORT		30-Aug-02								
	MISC	ELLANEOUS SM.	ALL STRUCT	URES D&D PI	ROJECT TASK	ORDER SCH	EDULE			
			ÇC	MPONENT 18	M					

5.0 Photographs

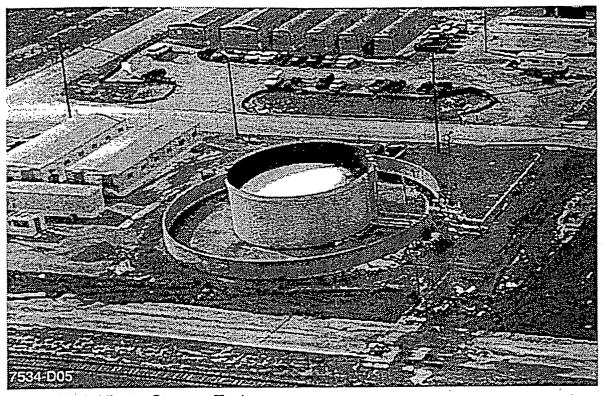
Figure 1 shows an aerial view of Component 18M. Figure 2 shows the future rail infrastructure location with relation to Component 18M.

REFERENCES

- U.S. Department of Energy, 1993, Operable Unit 3 Remedial Investigation and Feasibility Study Work Plan Addendum, Final, prepared by Fernald Environmental Restoration Management Corporation, Cincinnati, Ohio.
- U.S. Department of Energy, 1997, Operable Unit 3 Integrated Remedial Design/Remedial Action Work Plan, Final, prepared by Fluor Daniel Fernald Corporation, Cincinnati, Ohio.
- U.S. Department of Energy, 1998, Operable Unit 3 Miscellaneous Small Structures Implementation Plan for Above Grade Decontamination and Dismantlement, Final, prepared by Fluor Daniel Fernald Corporation, Cincinnati, Ohio.

FIGURE 1

4205



18M - High Nitrate Storage Tank

